Duval County Epidemiology Surveillance Report

The Florida Department of Health (FDOH) in Duval County, Epidemiology

April 2013

Public Health Surveillance

Surveillance is a key core public health function and has been defined as the regular collection, meaningful analysis, and routine dissemination of relevant data for providing opportunities for public health action to prevent and control disease. Surveillance is done for many reasons such as identifying cases of diseases posing immediate risk to communities, detecting clusters and monitoring trends of disease that may represent outbreaks, evaluating control and prevention measures and developing hypotheses for emerging diseases.

Within Duval County, surveillance data is obtained through:

- Reports of notifiable diseases and conditions by providers (Merlin)
- Laboratory data from the Bureau of Laboratories
- Emergency department (ED) syndromic surveillance as monitored through Electronic Surveillance System for the Early Notification of Community- based Epidemics (ESSENCE)
- Florida Poison Information Center Network (FPICN)
- ILINet Sentinel Provider Influenza Surveillance
- Passive reports from the community
  - o Notifiable diseases
  - o Outbreaks

Report Summary – April 2013

The month of April included a variety of surveillance and investigation activities within Duval County. These included monitoring enteric disease activity, influenza and RSV surveillance, and investigating numerous cases of reportable illness.

Influenza-like illness (ILI) activity and RSV are decreasing currently. FDOH in Duval continues to observe enteric illnesses and continued norovirus activity has been seen in the state.

The CDC's call for Hepatitis C testing of baby boomers is highlighted in the *Other Notable Trends and Statistics* section. Lastly, this edition's *notable investigation of the month* summarizes recent rash clusters in Duval County.

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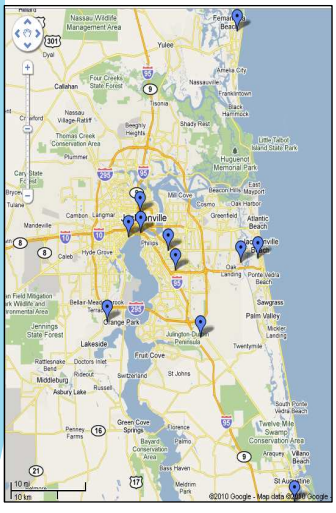
Notable Investigation of the Month

Rash Illness Clusters– Duval County

From April 18th- May 3, the FDOH in Duval County Epidemiology Program was notified of four facilities with rash illness in various settings within the community. The facilities included one childcare facility, two schools, and one group home. At the child care facility, six children had rash illness and five of them had a physician diagnosis of allergies, natural rash, or heat rash. At one of the schools, seven children were reported rash illness. Physician diagnoses included five students with hand, foot, and mouth disease (HFMD) and two students with impetigo. At the other school, three children were reported with varicella. The group home had one adult that had a physician diagnosis of scabies. The patient and all close contacts were started on treatment for scabies.

Rash illness clusters are not uncommon. They can be caused by numerous pathogens, histamine responses, heat, and numerous other things. This time of year has also previously produced rash clusters due to contact with the hairs on the Tussock Moth Caterpillar. For rash clusters in a facility, it is important to encourage physician diagnosis as soon as possible so that appropriate control measures can be instituted.

Figure 1: ESSENCE Hospitals



The Florida Department of Health in Duval County www.DCHD.net **515 W. 6th Street, Jacksonville, FL 32206 (904) 253-1850**

Report prepared by Karen Elliott, MPH, CHES - Karen_Elliott@doh.state.fl.us – All data are provisional

Enteric Disease Overview

Summary

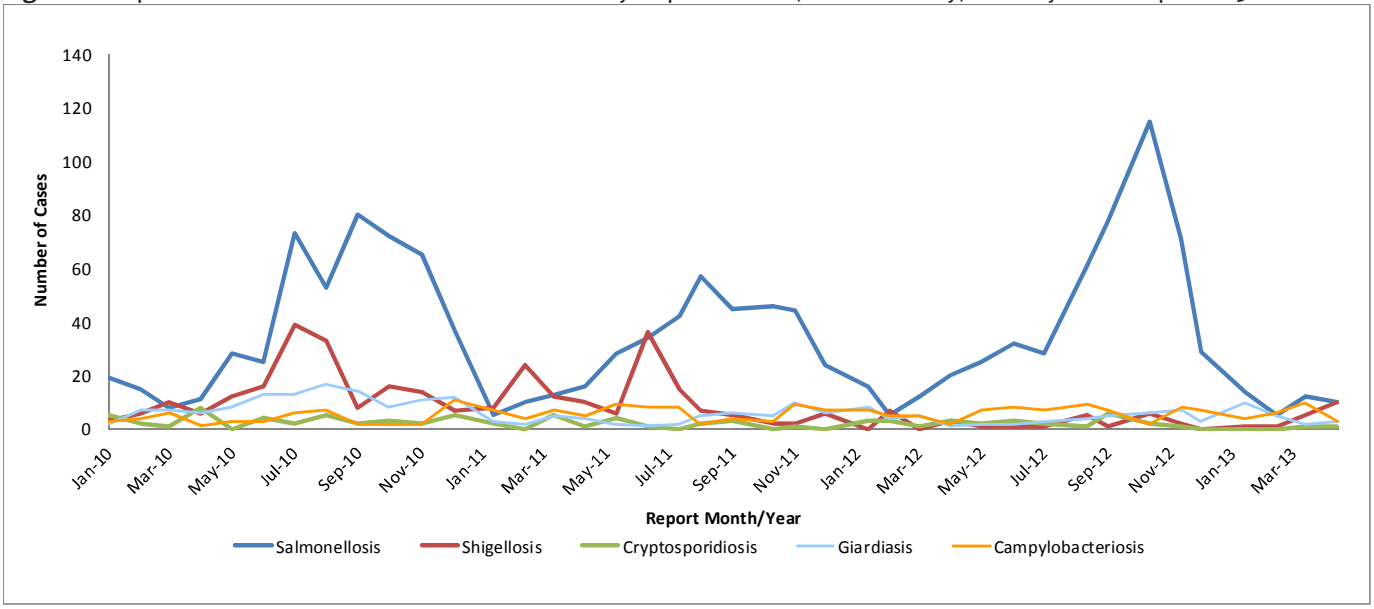
Reported cases of salmonellosis decreased slightly and reported enteric diseases overall remained low in April (Figure 2). Eleven (11) cases of salmonellosis were reported in April, which is slightly lower than the expected number (Figure 2&3). The mean number of cases for the same time period during the previous five years was 14.8 cases for April. The most represented age group of reported cases of salmonellosis for 2013 (18/43, 41.8%) occurred in the 0-4 age group. Cases of giardiasis (4) and shigellosis (10) increased in April and cases of campylobacteriosis (3) decreased (Figure 2).

Norovirus activity continues in Florida. During April, more than twelve (12) outbreaks of norovirus or gastrointestinal illness (suspect viral gastroenteritis) were reported in the State of Florida. Seven of the reported outbreaks were confirmed as norovirus GII per the last report in EpiCom and two were reported as norovirus GI. Three outbreaks of confirmed norovirus and two suspect viral gastroenteritis outbreaks were reported in Duval County during April (Source: FDENS EpiCom & FDOH in Duval surveillance). During March, twenty-one (21) norovirus or gastrointestinal illness outbreaks were reported in Florida via EpiCom and six outbreaks were reported in Duval County.

For prevention information, visit http://www.cdc.gov/norovirus/ & http://www.doh.state.fl.us/Environment/medicine/foodsurveillance/norovirus.htm.

ESSENCE Reportable Disease Surveillance Data

Figure 2: Reported Cases of Select Enteric Conditions by Report Month, Duval County, January 2010 – April 2013



Additional Enteric Disease Trends Update

Figure 3: Reported Cases of Salmonellosis by Report Week- Duval County - 2010-2013

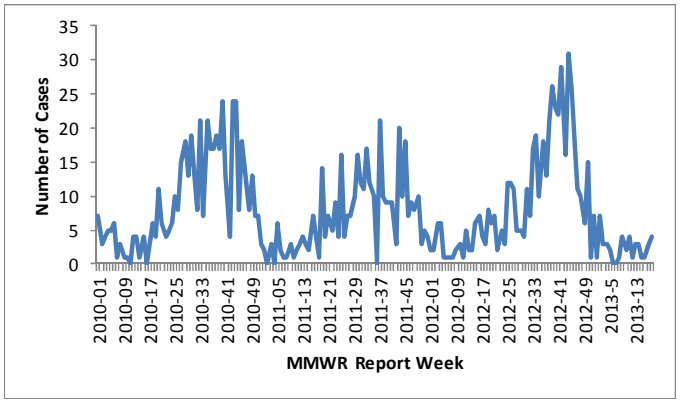
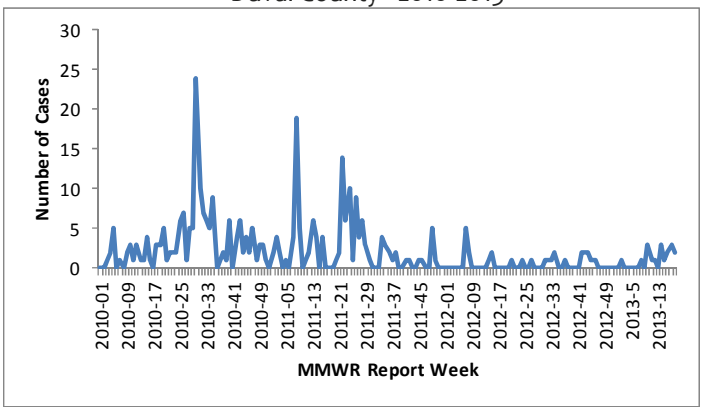


Figure 4: Reported Cases of Shigellosis by Report Week- Duval County - 2010-2013



Respiratory Disease & ILI Overview

Summary

Currently, influenza-like illness (ILI) activity is at a mild level. In Duval County, ED visits for ILI as monitored through ESSENCE remained above 2% for weeks 49-13 (Figure 5) and decreased below 2% for weeks 14-18. In April, there were six (6) positive influenza results within Duval County that were tested at the Bureau of Public Health Labs (BPHL) - Jacksonville. ILI ED visits in the age group of <1-19 increased slightly (Figure 6). Other viruses known to be currently circulating, potentially causing ILI, include rhinovirus, adenovirus, parainfluenza, enterovirus, human metapneumovirus, multiple coronaviruses, and respiratory syncytial virus (RSV).

Comprehensive Statewide Influenza Surveillance: http://www.doh.state.fl.us/disease_ctrl/epi/htopics/flu/reports.htm

Figure 5: Percentage of ILI from ED Chief Complaints, Florida ESSENCE - Duval County Participating Hospitals (n=8)

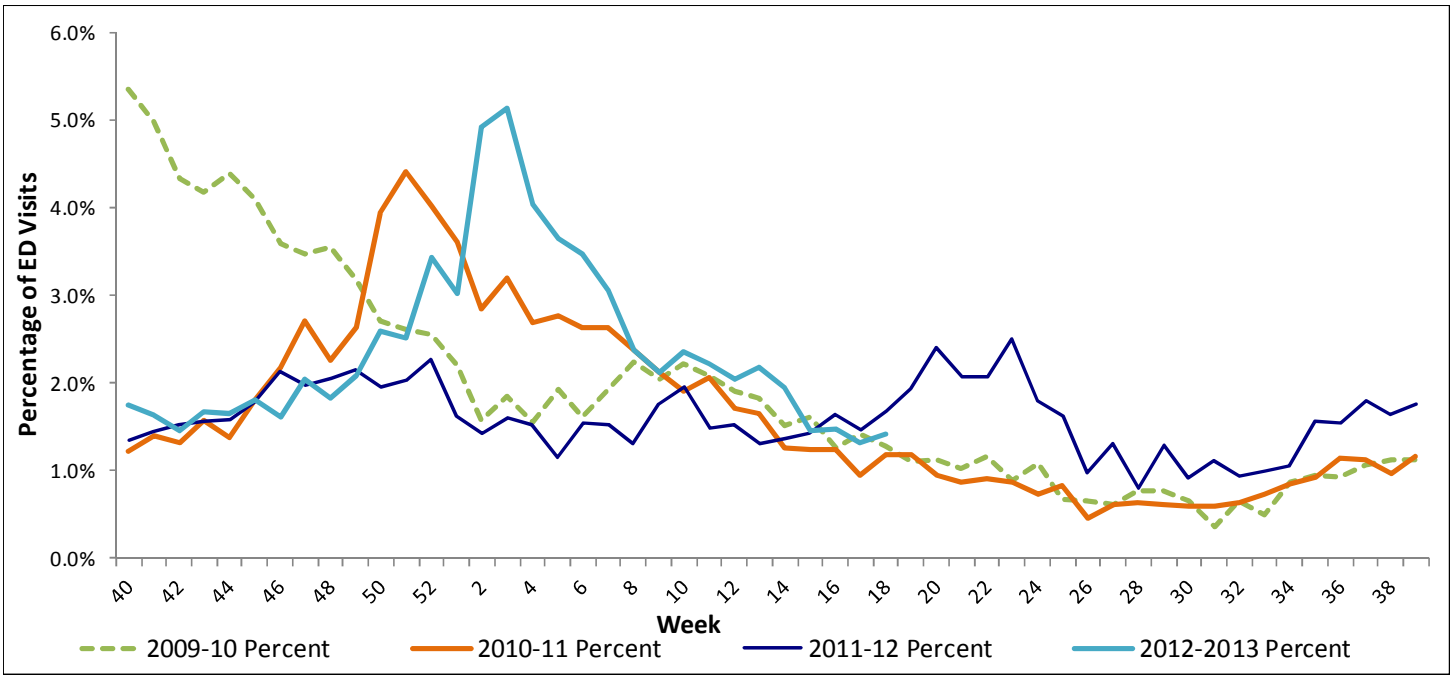
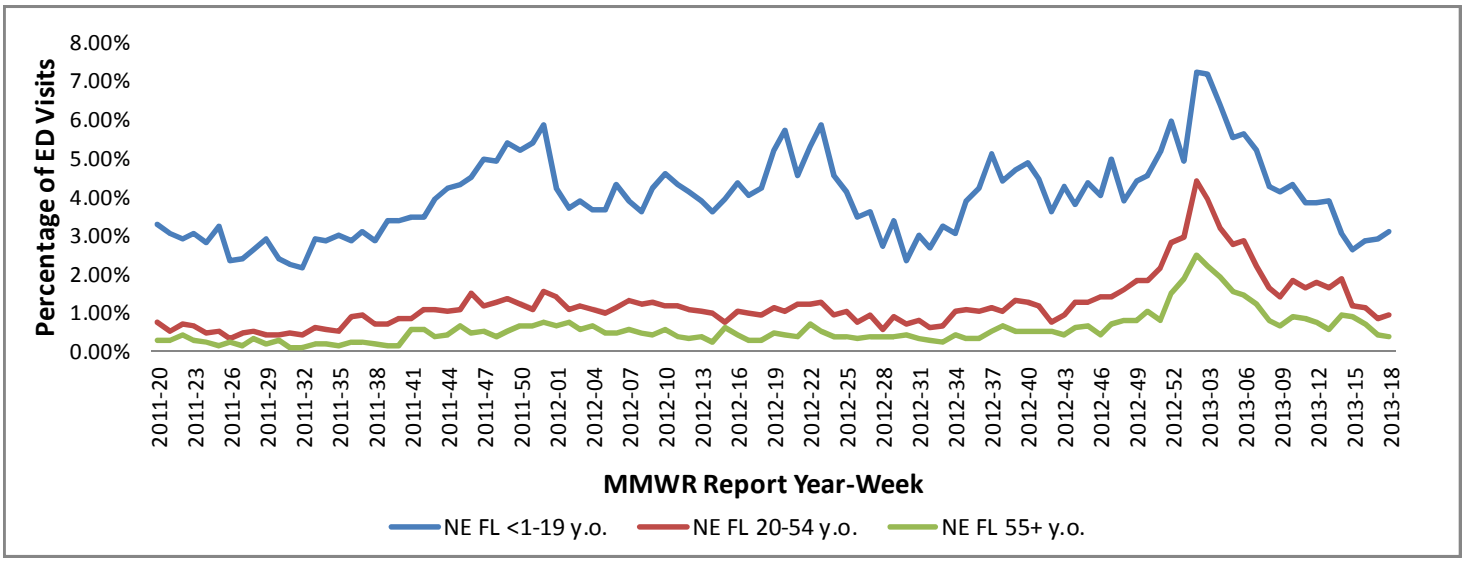


Figure 6: Age Comparison of ILI ED Visits – NE FL ESSENCE Facilities - Reported From May-2011 to April-2013



Respiratory Disease & ILI Overview Continued

Summary

Within the last month, Influenza B, unspecified (5), and Influenza A H3 (1) were detected by the Bureau of Public Health Laboratories (BPHL). Influenza B, unspecified (11) and Influenza A, unspecified (23) were detected by private labs using rapid antigen testing (as reported through Electronic Lab Reporting (ELR), Figure 8). Of the over one hundred (115) specimens received by the Bureau of Labs and testing positive for influenza in Duval County this influenza season, sixty-five (56.5%) were influenza A H3, three (2.6%) was influenza A H1N1 2009, forty (34.8%) were influenza B, and seven (6.1%) were influenza A, unspecified.

Figure 7: Number of Specimens Tested by FL Bureau of Public Health Laboratories (BPHL) and Percent Positive for Influenza by Lab Event Date – Week 20, 2011 to Week 18, 2013 as Reported by Merlin - Duval County

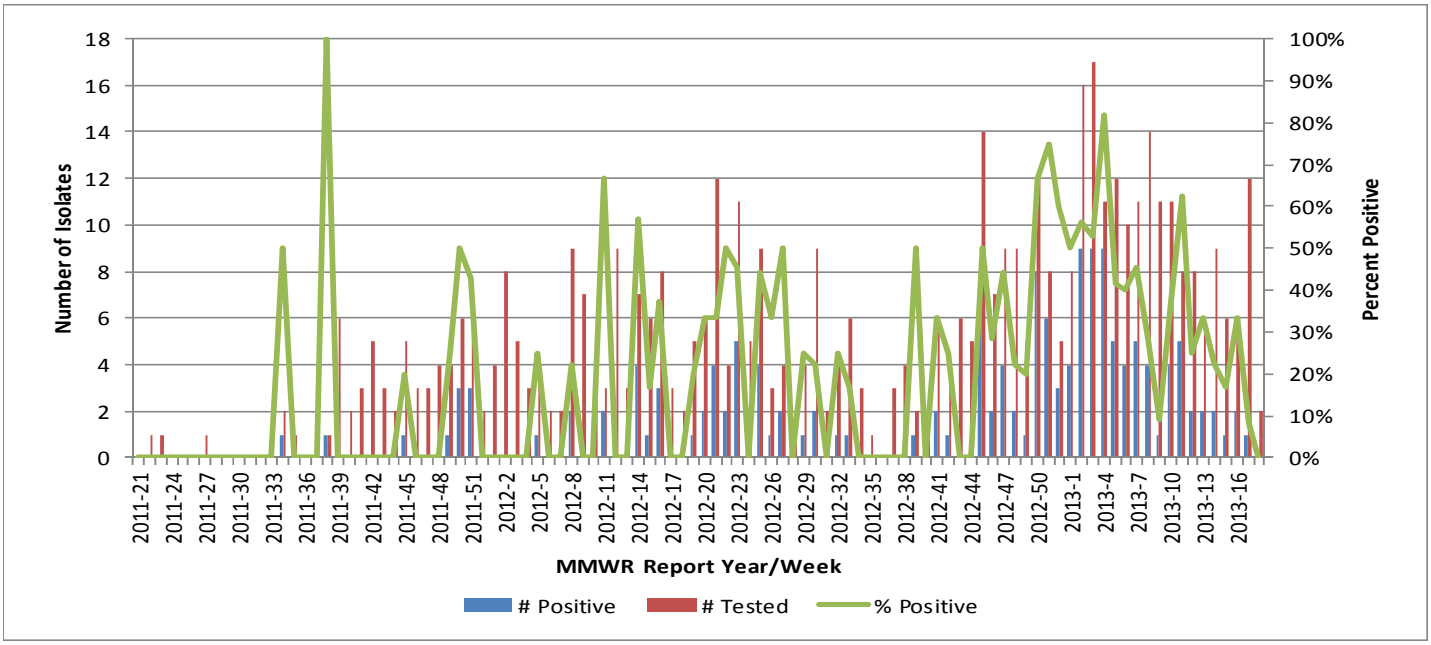
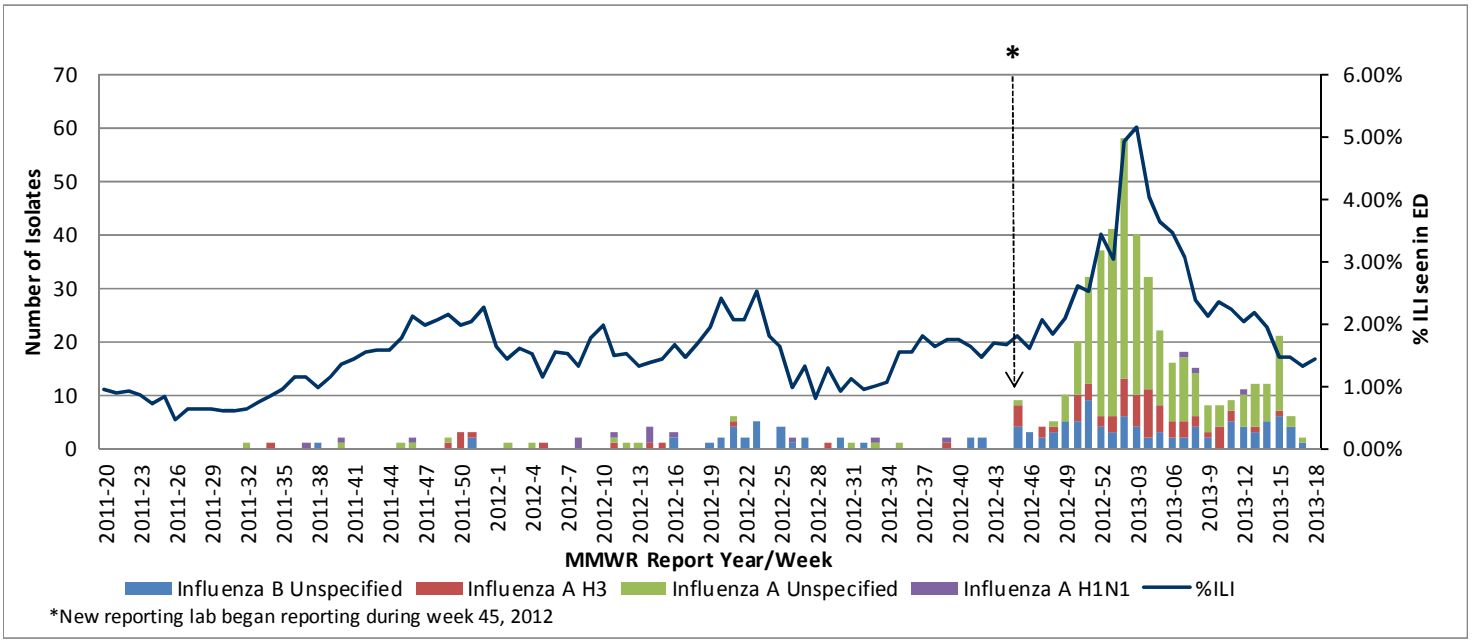


Figure 8: Number of Influenza-Positive Specimens Reported through Electronic Lab Reporting by Subtype by Lab Event Date as Reported by Merlin and Percent ILI in ESSENCE ED data – Week 20, 2011 to Week 18, 2012 - Duval County



Respiratory Virus Surveillance (NREVSS N. Region)

Summary

Circulation of influenza decreased in April. RSV also decreased. RSV season for the North Region of Florida traditionally runs from September to March. Within the **National Respiratory and Enteric Virus Surveillance System** (**NREVSS**) laboratory surveillance data for the North Florida region, the percent positive for influenza was 17.02% (80/470) (Figure 9) and 4.29% (19/443) of RSV specimens were positive during the month of April (Figure 10). In March, the percent positive for influenza was 16.81% and for RSV was 4.01%.

Figure 9: NREVSS - Monthly Influenza Surveillance Data by Region (NORTH) - Reported From 05/01/2009 to 04/27/2012

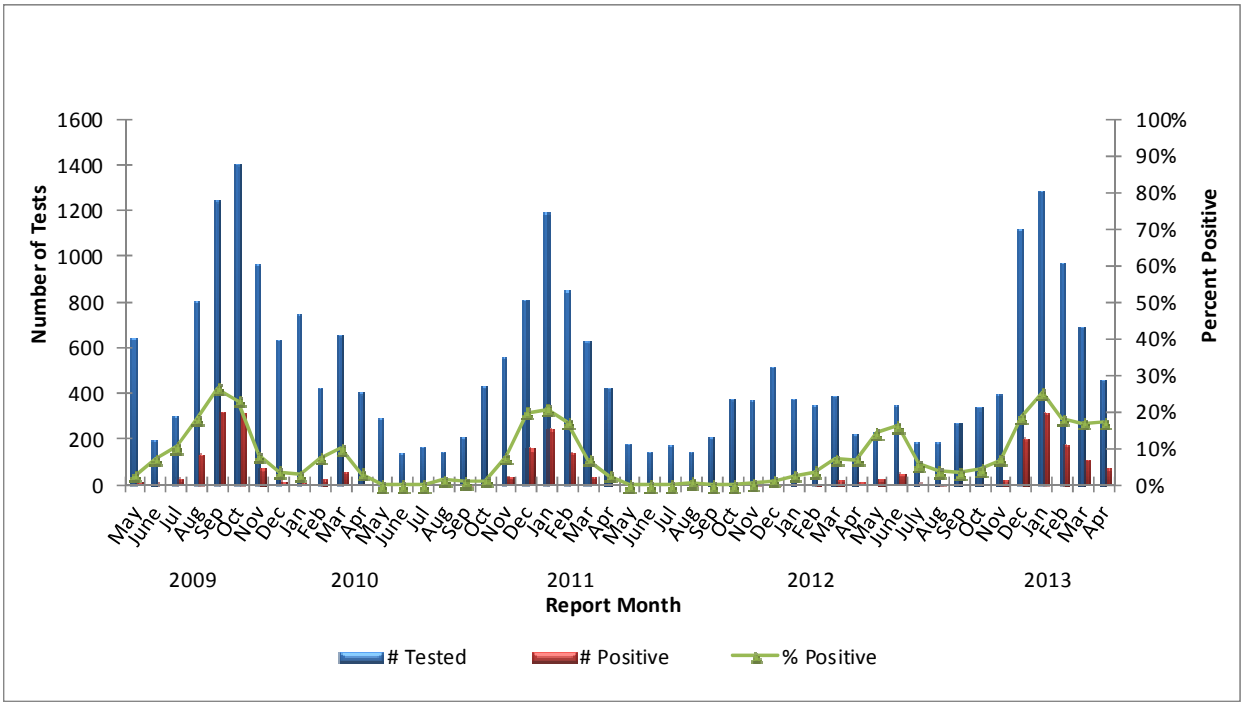
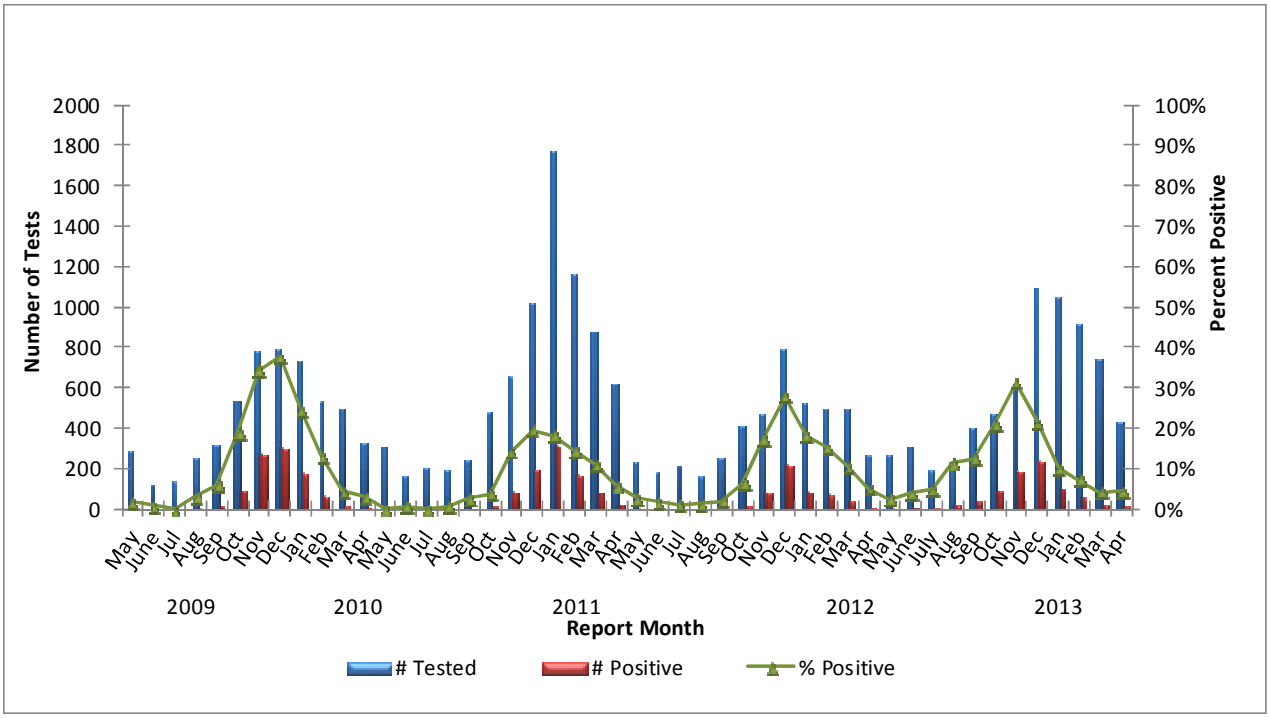


Figure 10: NREVSS - Monthly RSV Surveillance Data by Region (NORTH) - Reported From 05/01/2009 to 04/27/2012



Florida Mosquito-Borne Disease Summary

Summary

MBI surveillance utilizes monitoring of arboviral seroconversions in sentinel chicken flocks, human surveillance, monitoring of mosquito pools, veterinary surveillance, and wild bird surveillance. MBI surveillance in Florida includes endemic viruses West Nile Virus (WNV), Eastern Equine Encephalitis Virus (EEEV), St. Louis Encephalitis Virus (SLEV), and Highlands J Virus (HJV), and exotic viruses such as Dengue Virus (DENV) and California Encephalitis Group Viruses (CEV).

Figure 11: Florida Arbovirus Surveillance (January 1- May 4, 2012)

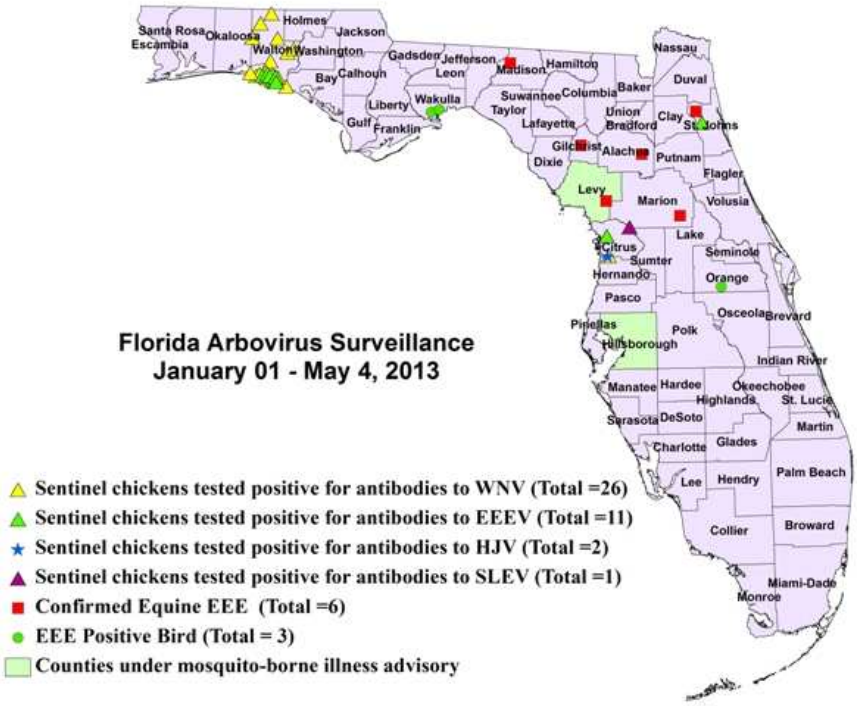


Table 1: Florida Mosquito-Borne Disease Surveillance Summary

Year to Date (through May 4, 2013)

Mosquito-Borne Disease	Human	Horses	Sentinel Chickens	Birds
West Nile Virus	-	-	26	-
St. Louis Encephalitis Virus	-	-	1	-
Highlands J Virus	-	-	2	-
California Encephalitis Group Viruses	-	-	-	-
Eastern Equine Encephalitis Virus	2	6	11	3

State of Florida 2013 Case Summary

EEEV Infection Acquired in Florida: Two human cases of EEEV infection with onset in January (1) and March (1) have been reported in 2013 in a Levy (1) and Hillsborough (1) Counties resident.

Imported Dengue (DENV): Thirty-one cases of dengue with onset in 2013 have been reported in individuals with travel history to a dengue endemic country in the two weeks prior to onset. Countries of origin were: Angola, Barbados, Brazil (2), The Caribbean, Columbia (3), Costa Rica, Dominican Republic (3), Guatemala, Haiti, Indonesia, Jamaica (3), Nigeria, Philippines, Puerto Rico (10), and Saint Martin. Counties reporting cases were: Brevard (2), Broward (3), Clay, Duval, Lee, Miami-Dade (10), Orange (7), Osceola, Palm Beach (4), and Volusia. Five of the cases were reported in non-Florida residents. In 2013, 21 of the 31 cases of dengue reported in Florida have been serotyped by PCR. Additional serotyping and strain typing are being conducted. The serotyped cases include DENV- serotype 1 (14), DENV- serotype 3 (2), and DENV- serotype 4 (5)

Imported Malaria: Fifteen cases of malaria with onset in 2013 have been reported. Countries of origin were: Democratic Republic of the Congo, Guinea, Ghana (2), Guyana, Haiti (5), Kenya, Nigeria, Sierra Leone (2), and Solomon Islands. Counties reporting cases were: Hillsborough (3), Lee, Miami-Dade (5), Orange (2), Palm Beach (2), Pinellas, and Seminole. Thirteen cases (87%) were diagnosed with Plasmodium falciparum, Two (13%) with Plasmodium vivax.

Resources

See the following web site for more information:

http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html
http://www.dchd.net/mosquitoborneillnessprevention.htm

Other notable trends and statistics

Notable Trends and Statistics- Hepatitis C: Testing Baby Boomers Saves Lives (Source: CDC)

About 3 million Americans have hepatitis C, most are baby boomers or people born from 1945-1965. Baby boomers are 5 times more likely to have hepatitis C. If you were born during these years, talk to your doctor about getting tested.

Hepatitis C is a liver disease that results from infection with the hepatitis C virus. Once infected with the hepatitis C virus, nearly 8 in 10 people remain infected for life. People with hepatitis C often have no symptoms and can live for decades without feeling sick. For some people, the disease can cause serious health problems including liver damage, cirrhosis, and even liver cancer. Hepatitis C is a leading cause of liver cancer and the leading reason for liver transplants.

Problem

- About 3 million adults in the US are infected with the hepatitis C virus, most are baby boomers.
- Anyone can get hepatitis C, but adults born from 1945-1965, or baby boomers, are 5 times more likely to have hepatitis C.
- About 3 in 4 people don't know they're infected so they aren't getting the necessary medical care and treatment.

Education for Patients: Getting Tested Is the Only Way to Know If You Have Hepatitis C

A simple blood test, called an antibody test, can tell if you have *ever* been infected with the hepatitis C virus. However, this test cannot tell if you are still infected with the virus. If the test is positive, then you need a different follow-up blood test to determine if you are still infected. About 1 in 2 adults who had a positive antibody test did not get a follow-up test reported to the health department in a CDC study. Without a follow-up test, you won't know if you are still infected with the hepatitis C virus.

Baby boomers can:

- Ask their doctor or nurse about getting tested for hepatitis C.
- Make sure to get a follow-up test if the antibody test is positive to see if they are still infected with the hepatitis C virus.
- Encourage family and friends born from 1945-1965 to get tested for hepatitis C.

Doctors, nurses, and other health care providers can:

- Test patients with other risks for hepatitis C, including blood transfusions before 1992 or injection drug use.
- Make sure everyone who has a positive hepatitis C antibody test gets the follow-up blood test (RNA Testing) and is linked to lifesaving care and treatment if infected.

Tuberculosis (TB) Surveillance – Duval County - 1/1/2013 through 4/30/2013 – All Data are Provisional

Eighty-six (86) cases of TB were reported by Duval County in 2012.

Table 2: Demographics and risk factors of TB cases reported year-to-date for 2013.

	Count	Total Cases	Percent		Count	Total Cases	Percent
Gender				**Risk Factors**			
Male	9	16	56.3%	Excess alcohol use within past year	4	16	25.0%
Female	7	16	43.8%	HIV co-infection	1	16	6.3%
Country of Origin				Illicit drug use within past year	0	16	0.0%
U.S.	9	12	75.0%	Homeless	2	16	12.5%
Non-U.S.	3	4	75.0%	Incarcerated at diagnosis	0	16	0.0%
Age Group				Unemployed	12	16	75.0%
0-9	1	16	6.3%	**Ethnicity**			
10-19	0	16	0.0%	Asian	4	16	25.0%
20-29	2	16	12.5%	Black	5	16	31.3%
30-39	6	16	37.5%	White	7	16	43.8%
40-49	3	16	18.8%	Hispanic	0	16	0.0%
50-59	2	16	12.5%	**Drug Resistance**			
≥ 60	2	16	12.5%	Resistant to isoniazid	0	16	0.0%
*** 3 people have not been offered HIV testing at the time of this report**							

For more tuberculosis surveillance data see: http://www.doh.state.fl.us/disease_ctrl/aids/trends/msr/2012/MSR2012.html

Recently Reported Diseases/Conditions in Florida

Table 3: Provisional Cases* of Selected Notifiable Disease, Duval County, Florida, April 2013

	Duval County						Florida					
	Month				Cumulative (YTD)		Month				Cumulative (YTD)	
	2013	2012	Mean†	Median¶	2013	2012	2013	2012	Mean†	Median¶	2013	2012
A. Vaccine Preventable Diseases												
Diphtheria	**0**	0	0.00	0	0	0	**0**	0	0.00	0	0	0
Measles	**0**	0	0.00	0	0	0	**0**	0	0.60	0	8	0
Mumps	**0**	0	0.00	0	0	1	**1**	0	1.20	1	1	3
Pertussis	**0**	1	1.00	1	6	2	**53**	35	24.20	21	147	135
Rubella	**0**	0	0.00	0	0	0	**0**	0	0.00	0	0	0
Tetanus	**1**	0	0.20	0	1	0	**1**	1	0.40	0	4	1
Varicella	**7**	4	6.60	5	18	14	**74**	119	144.60	128	275	433
B. CNS Diseases & Bacteremias												
Creutzfeldt-Jakob Disease	**0**	0	0	0	0	0	**3**	0	0.4	0	9	3
H. influenzae (invasive)	**6**	1	0.80	1	13	3	**29**	21	24.8	28	107	83
Meningitis (bacterial, cryptococcal, mycotic)	**1**	5	2.00	1	5	9	**10**	17	13	12	46	72
Meningococcal Disease	**0**	0	0.20	0	0	0	**4**	7	6.4	7	32	21
Staphylococcus aureus (VISA, VRSA)	**0**	0	0.00	-	1	2	**0**	0	0	-	2	4
Streptococcus pneumoniae (invasive disease)												
Drug resistant	**5**	0	2.40	2	18	8	**55**	39	63.2	64	251	203
Drug susceptible	**5**	3	2.80	3	14	9	**70**	47	64	67	312	242
Streptococcal Disease, Group A, Invasive	**1**	0	1.60	2	3	2	**33**	30	27.6	28	92	83
C. Enteric Infections												
Campylobacteriosis	**3**	2	4.40	2	23	19	**175**	122	113.2	91	569	573
Cryptosporidiosis	**1**	3	2.60	1	2	10	**26**	39	31.2	29	100	144
Cyclosporiasis	**0**	0	0.00	0	0	0	**0**	0	1	1	1	1
Escherichia coli, Shiga-toxin producing**	**0**	0	0.20	0	2	1	**29**	9	6.8	9	66	27
Giardiasis	**4**	1	3.80	4	23	18	**104**	79	108.4	96	353	303
Hemolytic Uremic Syndrome	**0**	0	0.00	0	0	0	**0**	0	0.2	0	1	0
Listeriosis	**0**	0	0.00	0	0	0	**3**	2	1.6	1	13	8
Salmonellosis	**11**	20	14.80	16	43	53	**314**	323	272.6	262	1106	1130
Shigellosis	**10**	3	4.00	3	17	10	**44**	215	116.4	79	135	545
Typhoid Fever	**0**	0	0.00	0	0	0	**0**	1	1.6	1	1	3

Recently Reported Diseases/Conditions in Florida

	Duval County						Florida					
	Month				Cumulative (YTD)		Month				Cumulative (YTD)	
	2013	2012	Mean†	Median¶	2013	2012	2013	2012	Mean†	Median¶	2013	2012
D. Viral Hepatitis												
Hepatitis A	**0**	0	0.00	0	2	0	**13**	8	12.2	11	32	38
Hepatitis B +HBsAg in pregnant women	**1**	0	2.00	2	9	10	**49**	32	39.2	41	172	119
Hepatitis B, Acute	**0**	0	0.40	0	5	3	**30**	18	23	21	103	82
Hepatitis C, Acute	**0**	1	0.20	0	1	2	**22**	9	6.6	5	74	44
E. Vector Borne, Zoonoses												
Animal Rabies	**0**	0	0.20	0	1	0	**10**	11	10.8	11	33	38
Ciguatera	**0**	0	0.00	0	0	0	**1**	0	1.6	1	2	7
Dengue Fever	**1**	0	0.00	0	1	0	**9**	6	2.4	3	47	13
Eastern Equine Encephalitis††	**0**	0	0	-	0	0	**0**	0	0	-	2	0
Ehrlichiosis/Anaplasmosis¶¶	**0**	0	0	-	0	0	**1**	2	0.2	-	3	5
Leptospirosis	**0**	0	0.00	0	0	0	**0**	0	0	0	0	0
Lyme Disease	**0**	0	0.00	0	0	2	**9**	6	3.2	3	25	31
Malaria	**0**	0	0.40	0	1	3	**4**	4	4.8	6	22	24
St. Louis Encephalitis††	**0**	0	0	-	0	0	**0**	0	0	-	0	0
West Nile Virus††	**0**	0	0	-	0	0	**1**	0	0	-	1	1
F. Others												
Botulism-infant	**0**	0	0.00	0	0	0	**0**	0	0	0	1	7
Brucellosis	**0**	0	0.00	0	0	0	**2**	4	1.6	1	3	7
Carbon Monoxide Poisoning	**0**	0	0.20	0	0	1	**9**	7	3.4	4	54	16
Hansens Disease (Leprosy)	**0**	0	0.00	0	0	0	**0**	2	0.8	1	1	3
Legionellosis	**0**	1	0.60	0	5	7	**10**	15	11.4	9	56	61
Vibrios	**0**	0	0.00	-	3	1	**13**	11	1.1	-	25	27

***** Confirmed and probable cases based on date of report as reported in Merlin to the Bureau of Epidemiology. Incidence data for 2012 is provisional.

† Mean of the same month in the previous five years

¶ Median for the same month in the previous five years

****** Includes *E. coli* O157:H7; shiga-toxin positive, serogroup non-O157; and shiga-toxin positive, not serogrouped, (Please note that suspect cases are not included in this report)

†† Includes neuroinvasive and non-neuroinvasive

¶¶ Includes *E. ewingii*, HGE, HME, and undetermined

Recently Reported Diseases/Conditions in Florida

Table 4: Duval County Reported Sexually Transmitted Disease for Summary for April 2013

Infectious and Early Latent Syphilis Cases

Sex	Area 4	%	Duval	%
Male	3	75%	2	50%
Female	1	25%	1	25%
Race	**Area 4**	**%**	**Duval**	**%**
White	1	25%	1	25%
Black	3	75%	2	50%
Hispanic	0	0%	0	0%
Other	0	0%	0	0%
Age	**Area 4**	**%**	**Duval**	**%**
0-14	0	0%	0	0%
15-19	2	50%	2	50%
20-24	0	0%	0	0%
25-29	0	0%	0	0%
30-39	0	0%	0	0%
40-49	2	50%	2	50%
50+	0	0%	0	0%
Total Cases	4		4	

Chlamydia Cases

Sex	Area 4	%	Duval	%
Male	177	28%	144	27%
Female	462	72%	387	73%
Race	**Area 4**	**%**	**Duval**	**%**
White	120	19%	89	17%
Black	295	46%	286	54%
Hispanic	26	4%	22	4%
Other	198	31%	134	25%
Age	**Area 4**	**%**	**Duval**	**%**
0-14	2	1%	2	1%
15-19	140	22%	111	21%
20-24	286	45%	237	45%
25-29	109	16%	95	18%
30-39	80	12%	69	11%
40-54	21	3%	16	3%
55+	1	1%	1	1%
Total Cases	639		531	

Gonorrhea Cases

Sex	Area 4	%	Duval	%
Male	78	48%	69	46%
Female	85	52%	80	54%
Race	**Area 4**	**%**	**Duval**	**%**
White	25	15%	21	14%
Black	103	63%	97	65%
Hispanic	4	2%	4	3%
Other	31	19%	27	18%
Age	**Area 4**	**%**	**Duval**	**%**
0-14	0	0%	0	0%
15-19	31	19%	26	17%
20-24	52	32%	49	33%
25-29	35	21%	34	23%
30-39	29	18%	25	17%
40-54	16	10%	15	10%
55+	0	0%	0	0%
Total Cases	163		149	

Please note that STD numbers are provisional.

* Area 4 consists of Baker, Clay, Duval, Nassau, and St. Johns

For more STD surveillance data see: http://www.doh.state.fl.us/disease_ctrl/aids/trends/msr/2012/MSR2012.html

Data Dictionary

Merlin: The Merlin system is essential to the control of disease in Florida. It serves as the state's repository of reportable disease case reports, and features automated notification of staff about individual cases of high-priority diseases. All reportable disease data presented for this report has been abstracted from Merlin, and as such are provisional. Data collected in Merlin can be viewed using http://www.floridacharts.com/merlin/freqrpt.asp.

Event Date: Reportable diseases and conditions presented within this report are reported by event date. This is the earliest date associated with the case. In most instances, this date represents the onset of illness. If this date is unknown, the laboratory report date is utilized as the earliest date associated with a case.

ILINet (previously referred to as the *Sentinel Provider Influenza Surveillance Program*): The Outpatient Influenza-like Illness Surveillance Network (ILINet) consists of more than 3,000 healthcare providers in all 50 states, the District of Columbia, and the U.S. Virgin Islands reporting over 25 million patient visits each year. Each week, approximately 1,400 outpatient care sites around the country report data to CDC on the total number of patients seen and the number of those patients with ILI by age group. For this system, ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a KNOWN cause other than influenza. The percentage of patient visits to healthcare providers for ILI reported each week is weighted on the basis of state population. This percentage is compared each week with the national baseline of 2.5%. Duval County has 5 ILInet providers that contribute to the state and national data.

NREVSS: The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors temporal and geographic patterns associated with the detection of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses, and rotavirus.

MMWR week: The week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned by the reporting local or state health department for the purposes of *Morbidity and Mortality Weekly Report* (*MMWR*) disease incidence reporting and publishing. Values for *MMWR* week range from 1 to 53, although most years consist of 52 weeks.

Syndromic Surveillance: An investigational approach where epidemiologists use automated data acquisition and generation of statistical signals, monitor disease indicators continually (real time) or at least daily (near real time) to detect outbreaks of diseases earlier and more completely than might otherwise be possible with traditional public health surveillance (e.g., reportable disease surveillance and telephone consultation).

ESSENCE: The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (**ESSENCE**) is a syndromic surveillance system for capturing and analyzing public health indicators for early detection of disease outbreaks. ESSENCE utilizes hospital emergency department chief complaint data to monitor disease indicators in the form of syndromes for anomalies. ESSENCE performs automatic data analysis, establishing a baseline with a 28-day average. Daily case data is then analyzed against this baseline to identify statistically significant increases. A yellow flag indicates a warning and a red flag indicates an alert. Currently, all eight Duval County Hospitals are sending ED data to the ESSENCE system; an additional 3, one in Clay, St Johns, and Nassau Counties, provide regional coverage. The 11 reporting hospitals in our region include Baptist Beaches (Duval), Baptist Downtown (Duval), Baptist Nassau (Nassau), Baptist South (Duval), Flagler (St. Johns), Memorial (Duval), Mayo (Duval), Orange Park (Clay), Shands Jacksonville (Duval), St. Luke's (Duval), and St. Vincent's (Duval)

Chief Complaint (CC): The concise statement describing the symptom, problem, condition, diagnosis, physician recommended return, or other factor that is the reason for a medical encounter.

Syndrome: A set of chief complaints, signs and/or symptoms representative of a condition that may be consistent with a CDC defined disease of public health significance. ESSENCE syndrome categories include botulism-like, exposure, fever, gastrointestinal, hemorrhagic, ILI, neurological, rash, respiratory, shock/coma, injury, and other.

Count: The number of emergency department visits relating to a syndrome of query.

Other Links and Resources:

Florida Department of Health, Bureau of Epidemiology http://www.doh.state.fl.us/disease_ctrl/epi/index.html
Florida Annual Morbidity Reports http://www.doh.state.fl.us/disease_ctrl/epi/Morbidity_Report/amr.html
Influenza Surveillance Reports http://www.doh.state.fl.us/disease_ctrl/epi/htopics/flu/reports.htm

The Florida Department of Health in Duval County

Disease Reporting Telephone Numbers
AIDS, HIV - (904) 253-2992
STD - (904) 253-2974, Fax - (904) 573-4935
TB Control - (904) 253-1070, Fax - (904) 253-1943
Animal Bites – (904) 253-2576, Fax – (904) 253-2390
All Others - (904) 253-1850, Fax - (904) 253-1851, After Hrs Emergency – (904) 434-6035

Section 381.0031 (1,2), Florida Statutes, provides that "**Any practitioner**, licensed in Florida to practice medicine, osteopathic medicine, chiropractic, naturopathy, or veterinary medicine, who diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health." The DOH county health departments serve as the Department's representative in this reporting requirement. Furthermore, this Section provides that "Periodically the Department shall issue a list of diseases determined by it to be of public health significance…and shall furnish a copy of said list to the practitioners…."

Reportable Diseases/Conditions in Florida Practitioner Guide 11/24/08*

*Reporting requirements for laboratories differ. For specific information on disease reporting, consult Rule 64D-3, *Florida Administrative Code (FAC)*.

AIDS, HIV - (904) 253-2992

+	Acquired Immune Deficiency Syndrome (AIDS)
+	Human Immunodeficiency Virus (HIV) infection (all, and including neonates born to an infected woman, exposed newborn)

STD - (904) 253-2974

•	Chancroid
•	Chlamydia
•	Conjunctivitis (in neonates ≤ 14 days old)
•	Gonorrhea
•	Granuloma inguinale
•	Herpes Simplex Virus (HSV) (in infants up to 60 days old with disseminated infection with involvement of liver, encephalitis and infections limited to skin, eyes and mouth; anogenital in children ≤ 12 years old)
•	Human papilloma virus (HPV) (associated laryngeal papillomas or recurrent respiratory papillomatosis in children ≤ 6 years old; anogenital in children ≤ 12 years)
•	Lymphogranuloma venereum (LGV)
•	Syphilis
☎	Syphilis (in pregnant women and neonates)

TB CONTROL - (904) 253-1070

•	Tuberculosis (TB)

CANCER - (305) 243-4600

+	Cancer (except non-melanoma skin cancer, and including benign and borderline intracranial and CNS tumors)

ALL OTHERS - (904) 253-1850

!	Any disease outbreak
!	Any case, cluster of cases, or outbreak of a disease or condition found in the general community or any defined setting such as a hospital, school or other institution, not listed below that is of urgent public health significance. This includes those indicative of person to person spread, zoonotic spread, the presence of an environmental, food or waterborne source of exposure and those that result from a deliberate act of terrorism.
•	Amebic encephalitis
•	Anaplasmosis
!	Anthrax
•	Arsenic poisoning
!	Botulism (foodborne, wound, unspecified, other)
•	Botulism (infant)
!	Brucellosis
•	California serogroup virus (neuroinvasive and non-neuroinvasive disease)
•	Campylobacteriosis
•	Carbon monoxide poisoning
!	Cholera
•	Ciguatera fish poisoning (Ciguatera)
•	Congenital anomalies
•	Creutzfeldt-Jakob disease (CJD)
•	Cryptosporidiosis
•	Cyclosporiasis
•	Dengue
!	Diphtheria
•	Eastern equine encephalitis virus disease (neuroinvasive and non-neuroinvasive)
•	Ehrlichiosis
•	Encephalitis, other (non-arboviral)
☎	Enteric disease due to: *Escherichia coli*, O157:H7 *Escherichia coli,* other pathogenic *E. coli* including entero- toxigenic, invasive, pathogenic, hemorrhagic, aggregative strains and shiga toxin positive strains
•	Giardiasis
!	Glanders
!	*Haemophilus influenzae* (meningitis and invasive disease)
•	Hansen's disease (Leprosy)
☎	Hantavirus infection
☎	Hemolytic uremic syndrome
☎	Hepatitis A
•	Hepatitis B, C, D, E, and G
•	Hepatitis B surface antigen (HBsAg) (positive in a pregnant woman or a child up to 24 months old)
!	Influenza due to novel or pandemic strains
☎	Influenza-associated pediatric mortality (in persons < 18 years)
•	Lead Poisoning (blood lead level ≥ 10µg/dL); additional reporting requirements exist for hand held and/or on-site blood lead testing technology, see 64D-3 FAC
•	Legionellosis
•	Leptospirosis
☎	Listeriosis
•	Lyme disease
•	Malaria
!	Measles (Rubeola)
!	Meliodiosis
•	Meningitis (bacterial, cryptococcal, mycotic)
!	Meningococcal disease (includes meningitis and meningococcemia)
•	Mercury poisoning
•	Mumps
☎	Neurotoxic shellfish poisoning
☎	Pertussis
•	Pesticide-related illness and injury
!	Plague
!	Poliomyelitis, paralytic and non-paralytic
•	Psittacosis (Ornithosis)
•	Q Fever
☎	Rabies (human, animal)
!	Rabies (possible exposure)
!	Ricin toxicity
•	Rocky Mountain spotted fever
!	Rubella (including congenital)
•	St. Louis encephalitis (SLE) virus disease (neuroinvasive and non-neuroinvasive)
•	Salmonellosis
•	Saxitoxin poisoning (including paralytic shellfish poisoning)(PSP)
!	Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV) disease
•	Shigellosis
!	Smallpox
•	*Staphylococcus aureus*, community associated mortality
☎	*Staphylococcus aureus* (infection with intermediate or full resistance to vancomycin, VISA, VRSA)
☎	Staphylococcus enterotoxin B (disease due to)
•	Streptococcal disease (invasive, Group A)
•	*Streptococcus pneumoniae* (invasive disease)
•	Tetanus
•	Toxoplasmosis (acute)
•	Trichinellosis (Trichinosis)
!	Tularemia
☎	Typhoid fever
!	Typhus fever (disease due to *Rickettsia prowazekii* infection)
•	Typhus fever (disease due to *Rickettsia typhi*, *R. felis* infection)
!	Vaccinia disease
•	Varicella (Chickenpox)
•	Varicella mortality
!	Venezuelan equine encephalitis virus disease (neuroinvasive and non-neuroinvasive)
•	Vibriosis (Vibrio infections)
!	Viral hemorrhagic fevers (Ebola, Marburg, Lassa, Machupo)
•	West Nile virus disease (neuroinvasive and non-neuroinvasive)
•	Western equine encephalitis virus disease (neuroinvasive and non-neuroinvasive)
!	Yellow fever

! = Report immediately 24/7 by phone upon initial suspicion or laboratory test order

☎ = Report immediately 24/7 by phone

• = Report next business day

+ = Other reporting timeframe